

ABSTRACT

A fixed wireless access system generally comprises a consumer premise equipment (CPE) unit, that is connected via an Ethernet interface to a personal computer or local area network, and a base station unit that is connected via an Ethernet interface to a network. As such, the CPE unit is preferably easily user-installed while the base station unit is preferably tower-mounted within a 1-5 mile range of the CPE unit. Both the CPE unit and base station unit preferably incorporate an integrated data transceiver/switch that enables a radio frequency air link operating in the 2.5-2.686 GHz range. Orthogonal frequency division multiplexing is used in the uplink and downlink transmissions between CPE units and base station units.